

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,067,506 B2
APPLICATION NO. : 10/087715
DATED : June 27, 2006
INVENTOR(S) : Kathleen S. Keegan et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 3, line 36, "199, 7;" should be -- 1997; --

Column 4, line 40, "C₁₋₃alkylene-heteroaryl" should be -- C₁₋₃alkyleneheteroaryl --

Column 4, line 42, "C₁₋₃alkylene-N(R⁴)₂" should be -- C₁₋₃alkyleneN(R⁴)₄ --

Column 4, line 47, "C₁₋₃-alkylenearyl" should be -- C₁₋₃alkylenearyl --

Column 6, line 64, "R¹⁶" should be -- OR¹⁶ --

Column 6, lines 65-66, "N(R¹⁵)COR¹⁶N(R¹⁵)C(O)OR¹⁶" should be
-- N(R¹⁵)COR¹⁶N(R¹⁵)C(O)OR¹⁶ --

Column 6, last line, "N(R¹⁶) . . ." should be -- N(R¹⁶) . . . --

Column 7, lines 10-11, "C₁₋₃alkyleneC₃₋₆heterocycloalkyl" should be
-- C₁₋₃alkyleneC₃₋₈heterocycloalkyl --

Column 7, line 12, " . . . N(R¹⁷)₃⁺" should be -- . . . N(R¹⁷)₃⁺ --

Column 8, line 49, "R¹" should be -- R² --

Column 9, line 50, "N(R²⁴)-C(O)" should be -- N(R²⁴)C(O) --

Column 10, line 53, "N(R²⁵)-C(O)C₁₋₃ . . ." should be -- N(R²⁵)C(O)C₁₋₃ . . . --

Column 10, lines 54-55, "N(R²⁵)C(O)CC₁₋₃ . . ." should be -- N(R²⁵)C(O)C₁₋₃ . . . --

Column 11, line 47, "C(O)R⁷₁" should be -- C(O)R⁷, --

Column 12, line 8, "C-R₁₀" should be -- C-R¹⁰ --

Column 12, line 38, " . . . (R²)-C(O) . . ." should be -- . . . (R¹²)C(O) . . . --

Column 13, line 19, "N(R¹³)C(o)OR⁷" should be -- N(R¹³)C(O)OR⁷ --

Column 13, line 26, "C₁₋₃alkyleneN(R₁₋₂) . . ." should be -- C₁₋₃alkyleneN(R¹²) . . . --

Column 13, line 27, " . . . alkyleneOR¹²," should be -- . . . alkyleneOR², --

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Column 13, lines 55-56, "N(R¹⁶)C(O)C,alkyleneC(O) R¹⁶" should be
-- N(R¹⁶)C(O)C₁₋₃alkyleneC(O)R¹⁶ --

Column 13, line 64, "C₁₆alkyl" should be -- C₁₋₆alkyl --

Column 13, line 65, "SO₂R⁷" should be -- SO₂R¹⁷ --

Column 13, lines 66-67, "C₁₋₃alkyleneC₁₋₃,heterocycloalkyl" should be
-- C₁₋₃alkyleneC₃₋₈heterocycloalkyl --

Column 13, line 67, "C₁₋₃alkyleneSOaryl" should be -- C₁₋₃alkyleneSO₂aryl --

Column 14, line 21, "bicyclo-[3.2.1]octyl" should be -- bicyclo[3.2.1]octyl --

Column 14, line 24, "(N(R_a)₂)" should be -- (N(R^a)₂) --

Column 14, line 25, "(SO₂R_a)" should be -- (SO₂R^a) --

Column 14, line 31, delete the comma after "Heterocycloalkyl"

Column 14, line 41, delete the hyphen between "alkylene" and
"heteroaryl"

Column 18, line 28, delete the "I" before "Suitable"

Column 18, line 62, the paragraph starting with "Theoretical" should be a continuation
of the previous paragraph, not a new paragraph.

Column 19, lines 2-31, delete lines starting with "structural" on line 2 through "This
concentration is defined as" on lines 30-31

Column 20, lines 41-43, the phrase "growth related protein," is repeated four times,
delete all but one of these occurrences

Column 20, line 44, delete the "*" from between "growth" and "factor"

Column 20, line 49, delete second occurrence of "nerve growth factor"

Column 21, line 24, "orchemotherapy" should be -- or chemotherapy --

Column 21, line 28, delete the hyphen between "administered" and "before"

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Column 21, line 57, delete the period after "that"

Column 22, line 36, delete the dash between "5-fluorouracil" and "(5-FU)"

Column 69, line 10, "(5.8 9;" should be -- (5.8 g; --

Column 69, line 33, "Step (4): Lithium Hydroxide Hydrolysis Procedure" should be a new heading

Column 69, line 54, "aminioethyl" should be -- aminoethyl --

Column 72, under the heading "Characterization" line starting with "12" "Mhz" both occurrences, should be -- MHz --

Column 73, line 29, delete the hyphen in "dimethoxy-ethane"

Column 73, line 33, "Mhz" should be -- MHz --

Column 73, line 57, "2--" should be -- 2- --

Column 73, line 65, "Mhz" should be -- MHz --

Column 74, line 18, "iso-cyanate" should be -- isocyanate --

Column 74, line 62, "Mhz" should be -- MHz --

Column 74, line 65, "Mhz" should be -- MHz --

Column 75, line 29, "J 8.8" should be -- J=8.8 --

Column 75, line 65, "(10.16-10.06, m, 3H)" should be -- 10.16-10.06 (m, 3H) --

Column 77, line 24, "iso-cyanate" should be -- isocyanate --

Column 77, line 56, "H₂in" should be -- H₂ in --

Column 78, line 28, "vacac" should be -- vacuo --

Column 79, line 33, "7.43(d" should be -- 7.43 (d --

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Column 79, line 34, "7.09(dd," should be -- 7.09 (dd --

Column 79, line 37, "1.10(m," should be -- 1.10 (m, --

Column 79, line 62, "8.03(d," should be -- 8.03 (d, --

Column 79, line 62, "7.47,(d," should be -- 7.47 (d, --

Column 79, line 63, "7.04(dd," should be -- 7.04 (dd, --

Column 80, line 17, "3methoxybenzoic" should be -- 3-methoxybenzoic --

Column 81, line 19, "300 mL" should be -- 300 μ L --

Column 81, line 23, "H2O" should be -- H₂O --

Column 81, line 27, "3.97 (s." should be -- 3.97 (s, --

Column 81, line 49, 7.23 (i," should be -- 7.23 (m, --

Column 82, line 2, "8.22 (d" should be -- 8.22 (d, --

Column 83, line 17, delete the comma between "using" and "2"

Column 83, line 59, "N-(H" should be -- N-(1H --

Column 84, line 20, "7.05 (d 3H), 3.56" should be
-- 7.05 (dd, 1H), 6.98 (dd, 1H), 3.97 (s, 3H), 3.56 --

Column 84, line 21, "(in," should be -- (m, --

Column 84, line 66, "7.51 s" should be -- 7.51 (s --

Column 85, line 1, "(in," should be -- (m, --

Column 85, line 49, "2.41 (m" should be -- 2.41 (m, --

Column 86, lines 46-47 "3.05 (m (m." should be -- 3.05 (m, --

Column 87, line 19, "³-morpholin" should be -- 3-morpholin --

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 87, line 38, "³-Methoxy" should be -- 3-Methoxy --

Column 87, line 39, "⁴-(³-pyrazin" should be -- 4-(3-pyrazin --

Column 87, line 41, "³-(⁴-methyl" should be -- 3-(4-methyl --

Column 88, line 23, "IN" should be -- 1N --

Column 88, line 46, "(IN)" should be -- (1N) --

Column 91, line 23, "pyridin4" should be -- pyridin-4 --

Column 91, line 65, "¹H)" should be -- 1H) --

Column 96, line 19, "trifluorace" should be -- trifluoroacetic acid --

Column 96, line 42, "6 8.79" should be -- δ 8.79 --

Column 101, line 4, "2.39 (m, 2.24" should be -- 2.39 (m, 2H), 2.24 --

Column 101, line 5, "mile" should be -- m/e --

Column 103, line 62, "8.32 (d, 1H," should be -- 8.32 (d, 1H), --

Column 105, line 30, "(, 11H)" should be -- (m, 1H) --

Column 106, line 32, "CH₂C₁₂" should be -- CH₂Cl₂ --

Column 107, line 29, "3methoxy" should be -- 3-methoxy --

Column 107, line 58, "(s, 2H), 2H)," should be -- (s, 2H), --

Column 107, last line, "2H), 7.52 (m, 7H), 489.1." should be -- 2H). MS APCI-pos, M+1=489.1. --

Column 108, line 49, "NH₄0H," should be -- NH₄OH, --

Column 109, line 30, "about 1 of" should be -- about 1/2 of --

Column 109, line 38, "mmol) 50" should be -- mmol) in 50 --

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Column 109, line 55, "4.33 (, 1H)," should be -- 4.22 (m, 1H), --

Column 109, lines 57-58, "1.70-1.77 (n, 1H)," should be -- 1.70-1.77 (m, 1H), --

Column 110, line 66, "H₂O" should be -- H₂O --

Column 111, line 9, "H₂O" should be -- H₂O --

Column 111, line 9, "dried" should be -- dried --

Column 111, line 30, "8.12 (s, 2H)," should be -- 8.12 (s, 1H), --

Column 112, line 8, "22 ml," should be -- 22 mL, --

Column 112, line 43, "S 8.57" should be -- δ 8.57 --

Column 113, line 48 "arid" should be -- and --

Column 113, line 62, "7.65 (d, 1H," should be -- 7.65 (d, 1H), --

Column 114, line 46, "8.39 (d, 1H," should be -- 8.39 (d, 1H), --

Column 115, lines 20-21, "7.39 (M, 1H)," should be -- 7.39 (m, 1H), --

Column 115, line 35, "8.61 (d, 1H," should be -- 8.61 (d, 1H), --

Column 116, line 1, "8.68 (d, 1H," should be -- 8.68 (d, 1H), --

Column 116, line 2, "8.48 (d, 1H," should be -- 8.48 (d, 1H), --

Column 117, line 28, "8.43 (d, 1H," should be -- 8.43 (d, 1H), --

Column 118, line 29, "8.21 (s, 1H)," should be -- 8.21 (s, 1H), --

Column 118, line 29, "7.24 (d, 1H)," should be -- 7.24 (d, 1H), --

Column 118, lines 29-30, "6.76 (m, 1H)," should be -- 6.76 (m, 1H), --

Column 118, line 30, "3.56 (m, 2H)," should be -- 3.56 (m, 2H), --

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Column 118, line 31, "2.24 (s, 1H), 2.13 (m, 1H)" should be -- 2.24 (s, 6H), 2.13 (m, 2H) --

Column 118, lines 65-66, "2.37 (s, 13H)," should be -- 2.37 (s, 3H), --

Column 120, line 30, "8.66 (d, 1H," should be -- 8.66 (d, 1H), --

Column 120, line 65, "8.26 (d, 1H," should be -- 8.26 (d, 1H), --

Column 121, line 29, "8.66 (d, 1H," should be -- 8.66 (d, 1H), --

Column 121, lines 64-65, "8.33 (d, 1H, 8.00 (d, 1H," should be -- 8.33 (d, 1H), 8.00 (d, 1H), --

Column 121, line 66, ".25 (m, 1H)," should be -- 7.25 (m, 1H), -- .

Column 122, line 63, "t₁₆-DMSO" should be -- d₆-DMSO --

Column 122, lines 64-65, "8.29 (d, 1H, 8.03 (d, 1H," should be -- 8.29 (d, 1H), 8.03 (d, 1H), --

Column 123, lines 29-30, "8.33 (d, 1H, 8.00 (d, 1H," should be -- 8.33 (d, 1H), 8.00 (d, 1H), --

Column 124, line 25, "8.66 (d, 1H," should be -- 8.66 (d, 1H), --

Column 124, line 26, "8.28 (d, 1H," should be -- 8.28 (d, 1H), --

Column 124, line 27, "7.55 (d, 1H," should be -- 7.55 (d, 1H), --

Column 125, line 16, "20 ml" should be -- 20 mL --

Column 126, line 55, "1-[5-" should be -- 1-{5- --

Column 127, line 28, "6.79 (d, 1H," should be -- 6.79 (d, 1H), --

Column 129, line 31, "6.75 (d, 1H," should be -- 6.75 (d, 1H), --

Column 130, line 31, insert -- 2.35 (s, 3H). -- between "2.38 (s, 3H)" and "LRMS"

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 132, lines 9-10, "7.70 (d, 1H, 7.19 (d, 1H," should be -- 7.70 (d, 1H), 7.19 (d, 1H), --

Column 132, line 11, "2.5 (s, 3H)." should be --2.35 (s, 3H). --

Column 133, line 40, "6.75 (d, 1H," should be -- 6.75 (d, 1H), --

Column 134, line 34, "3.15 (br d, 1H," should be -- 3.15 (br d, 1H), --

Column 135, line 33, "6.79 (d, 1H, 6.75 (d, 1H," should be -- 6.79 (d, 1H), 6.75 (d, 1H), --

Column 136, line 21, delete the comma after "and"

Column 136, line 52, "ylmethoxy)5-" should be -- ylmethoxy)-5- --

Column 137, Compound 277, the dashed bond at the top of the structure should be a solid bond

Column 138, line 26, "1H NMR" should be -- ¹H NMR --

Column 138, line 64, "8.49 (d, 1H," should be -- 8.49 (d, 1H), --

Column 138, line 65, "7.65 (d, 1H," should be -- 7.65 (d, 1H),. --

Column 138, line 67, "(M4 1)." should be -- (M+1). --

Column 139, line 65, "8.20 (s, 1(dd, 2H)," should be -- 8.20 (s, 1H), 8.10 (s, 1H), 6.81 (dd, 2H), --

Column 139, line 67, "2.36 (s, 3H), 2H)." should be -- 2.36 (s, 3H), 2.19 (m, 4H), 1.90 (m, 2H). --

Column 141, line 35, "Compound 286" should be a heading

Column 143, line 40, "(M4 1)" should be -- (M+1) --

Column 144, line 28, "to the give the" should be -- to give the --

Column 144, line 30, "7.96 (d, 11H)" should be -- 7.96 (d, 1H) --

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Column 144, line 31, "11H)" should be -- 1H) --

Column 144, line 55, "3.52 (n,11H)" should be -- 3.52 (m, 1H) --

Column 145, lines 15-16, "6.65 (dd, 1H, 6.51 (d, 1H, 3.96 (mi, 2H)" should be -- 6.65 (dd, 1H), 6.51 (d, 1H), 3.96 (m, 2H) --

Column 146, line 9, "6.58 (d, 1H," should be -- 6.58 (d, 1H), --

Column 146, line 9, "3.57 (d, 1H," should be -- 3.57 (d, 1H), --

Column 146, line 61, "5 7.92" should be -- δ 7.92 --

Column 146, line 61, "7.08 (dd, 1H," should be -- 7.08 (dd, 1H), --

Column 146, line 63, "(dd, 1H," should be -- (dd, 1H), --

Column 147, line 24, "7.25 (mi, 1H)," should be -- 7.25 (m, 1H), --

Column 147, lines 24-25, "7.18 (d, 1H," should be -- 7.18 (d, 1H), --

Column 147, line 25, "6.70 (d, 1H," should be -- 6.70 (d, 1H), --

Column 148, line 6, after "7.76 (t, 1H)," please insert -- 7.61 (s, 1H), --

Column 149, line 61, "2-(2-Aziridin-" should be -- 1-[2-(2-Aziridin- --

Column 161, line 25, "(d, 11)," should be -- (d, 1H), --

Column 161, line 49, after "3.90 (s, 3H)" please insert -- 2.30 (s, 3H) --

Column 162, line 23, "-O-" should be -- -3- --

Column 162, line 27, please delete the comma after "with"

Column 162, line 65, "8.26 (s, H)," should be -- 8.26 (s, 1H), --

Column 163, line 64, "-carbatic" should be -- -carbamic --

Column 167, line 56, "(1.0 g)" should be -- (1.0 g, --

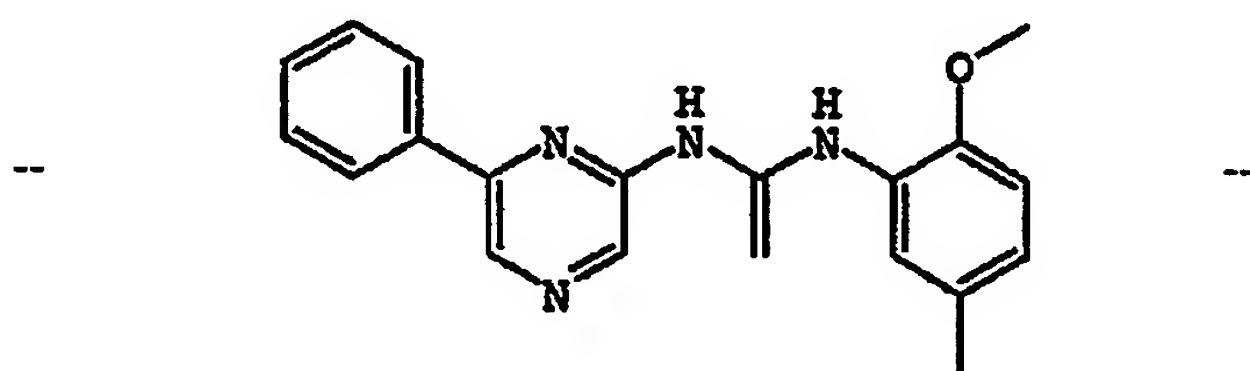
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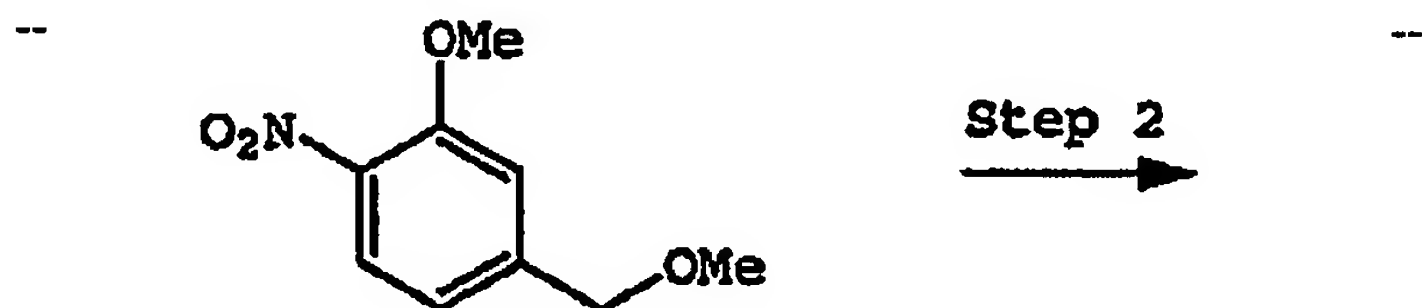
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 169, please replace the structure for Compound 331 and insert therefor



1-(2-Methoxy-5-methyl-phenyl) -
3-(6-phenyl-pyrazin-2-yl)-urea

Column 171, line 45, after "Step 1" please insert



Column 171, line 52, "Step 1" should be -- Step 3 --

Column 172, line 30, after "60°C" first occurrence, please insert -- before adding 2-methoxy-4-methoxymethylaniline as a solution in 4 mL toluene. After stirring for 6 hr --

Column 173, line 21, delete ")." second occurrence

Column 174, lines 13-14, delete "¹H NMR (400 MHz, CDCl₃): δ" second occurrence

Column 174, line 64, "8.06 (s, 1H," should be -- 8.06 (s, 1H), --

Column 177, line 37, "and the" should be -- and then --

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Column 178, line 67, “(-NH3)” should be -- (-NH₃) --

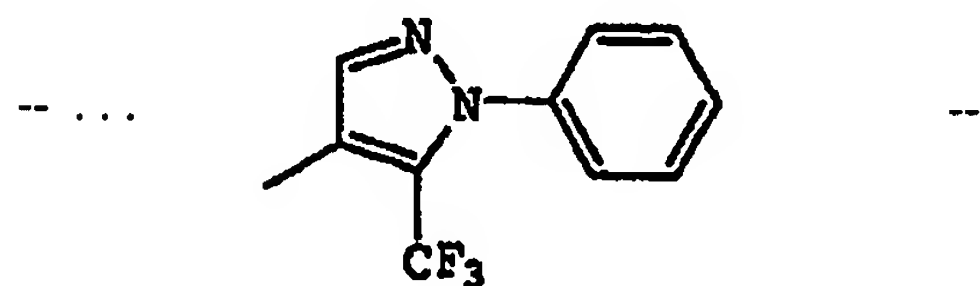
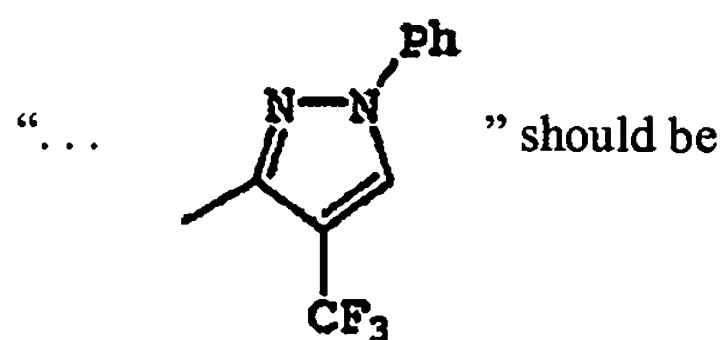
Column 180, line 46, “4.G8” should be -- 4.08 --

Column 180, line 65, “J7.83” should be -- J=7.83 --

Column 182, line 61, “Methoxy4” should be -- Methoxy-4 --

Column 182, line 64, “4.23 (,” should be -- 4.23 (s, --

Column 185, Compound 361, right-hand side of structure,



Compound 186, line 39, “Methoxy4” should be -- Methoxy-4 --

Column 186, line 42, “;7.89” should be -- 7.89 --

Column 188, line 33, “The,5” should be -- The 5' --

Column 188, line 35, “Saint Louis, IL” should be -- Saint Louis, MO --

Column 189, line 4, “developed” should be -- develop --

Column 189, line 27, delete the comma between “p38” and “MAP”

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Column 189, line 56, "Chk 1" should be -- Chk1 --

Column 189, line 60, "Chk 1" should be -- Chk1 --

Column 190, line 37, "minutes" should be -- minute --

Column 192, line 16, delete the hyphen between "in" and "the"

Column 192, line 60, " CO_2R^3_1 ," should be -- CO_2R^3 , --

Column 194, line 3, delete "null,"

Column 194, line 33, " C_2R^{25} " should be -- CO_2R^{25} --

Column 195, line 17, delete "are"

Column 195, line 23, " C_2R^3 " should be -- CO_2R^3 --

Column 195, line 59, "lease one or more" should be -- least one of a --

Column 196, line 53, " OCF_3 " should be -- OCF^3 --

Column 197, line 34, "Hodgkins, lymphoma" should be -- Hodgkin's lymphoma --

Column 198, line 32, " SR^7_1 ," should be -- SR^7 , --

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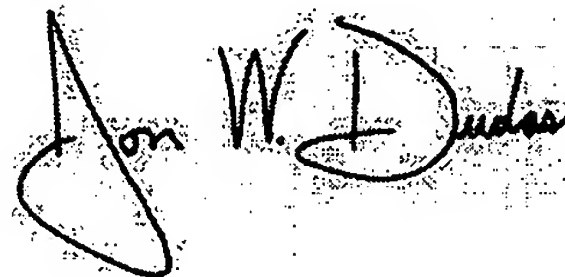
Column 199, line 8, insert --is-- between "Q" and "OCH₃"

Column 202, line 40, insert -- (-- before "piperidin"

Column 203, line 35, "CF₁₀" should be -- CR¹⁰ --

Signed and Sealed this

Twentieth Day of February, 2007

A handwritten signature in black ink, appearing to read "Jon W. Dudas", is written over a faint, circular embossed seal of the United States Patent and Trademark Office.

JON W. DUDAS
Director of the United States Patent and Trademark Office